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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,585	11/06/2001	Takehiro Ikeda	3815/136	8660

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EXAMINER	
PHAN, HUY Q	
ART UNIT	**PAPER NUMBER**
2685	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/993,585	Applicant(s) IKEDA ET AL.	
	Examiner Huy Q Phan	Art Unit 2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 November 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9,11,12*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bahl et al. (US-6,385,454) in view of Jones (US-6,363,323).

Regarding claim 1, Bahl et al. disclose in figures 1 and 2, a mobile communication system (fig. 1) including a location management agent (MSC) for conducting a new location registration and a registration update (col. 19, lines 17-31) of a mobile station (MU) in a prescribed service area, said mobile communication system comprising:

schedule notifying means for sending moving schedule information from said mobile station to said location management agent in advance (col. 7, line 56-col. 8, line 16 and col. 11, lines 12-22); and

a location registration database provided in said location management agent for registering the moving schedule information about the mobile station (col. 19, lines 17-31 and col. 11, lines 12-59) such that the moving schedule information has correspondence with a scheduled destination location registration area, wherein said location management agent, referring to said location registration database, updates the

location registration area of the mobile station in the prescribed service area (col. 19, lines 17-31 and col. 11, lines 12-59).

But, Bahl et al. do not particular disclose schedule notifying means for sending moving schedule information at a particular time from said mobile station. However in analogous art, Jones teaches schedule notifying means for sending moving schedule information at a particular time from said mobile station (col. 3, lines 19-31 and col. 7, lines 17-34). Since, Bahl et al. and Jones are related to monitoring travel of a mobile phone and since Bahl et al. teach sending a schedule of moving through cells (a crude timeline); therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Bahl et al. by specifically having schedule notifying means for sending moving schedule information at a particular time from said mobile station as taught by Jones for purpose of improving the technique for a new location registration and a registration update of a mobile station in a prescribed service area in order to enhance the quality and reliability of wireless telecommunication service.

Regarding claim 2, Bahl et al. and Jones disclose a mobile communication system as recited in the rejection of claim 1. Bahl et al. further disclose wherein said schedule notifying means includes schedule managing means installed in said mobile station (col. 4, lines 45-49), and said schedule managing means notifies said location management agent of the moving schedule information automatically (col. 4, lines 50-53).

Regarding claims 3 and 4, Bahl et al. and Jones disclose a mobile communication system as recited in the rejections of claims 1 and 2 respectively. Bahl et al. further disclose wherein each location registration area in said prescribed service area comprises a resource management agent for managing a number of its radio channels (col. 11, lines 1-35), and wherein said resource management agent adaptively controls the number of the radio channels to be assigned to the location registration area in response to a command sent from said location management agent, in accordance with the moving schedule information registered in said location registration database (col. 18, lines 5-67 and col. 20, lines 22-67).

Regarding claim 5, Bahl et al. disclose in figures 1 and 2, a location registration method of a mobile station (MU) in a mobile communication system (fig. 1) including a location management agent (MSC) for conducting a new location registration and a registration update (col. 19, lines 17-31) of the mobile station in a prescribed service area, said location registration method of a mobile station in a mobile communication system comprising:

a first step of sending moving schedule information from said mobile station to said location management agent in advance (col. 7, line 40-col. 8, line 16 and col. 11, lines 12-22);

a second step of registering, in a location registration database provided in said location management agent, the moving schedule information about the mobile station

in correspondence and a scheduled destination location registration area (col. 19, lines 17-31 and col. 11, lines 12-59); and

a third step of updating the location registration area of the mobile station in the prescribed service area by said location management agent with referring to said location registration database (col. 19, lines 17-31 and col. 11, lines 12-59).

But, Bahl et al. fail to expressly show sending moving schedule information at a particular time from said mobile station. However, Jones teaches sending moving schedule information at a particular time from said mobile station (col. 3, lines 19-31 and col. 7, lines 17-34). Since, Bahl et al. and Jones are related to monitoring travel of a mobile phone and since Bahl et al. teach sending a schedule of moving through cells (a crude timeline); therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Bahl et al. by specifically sending moving schedule information at a particular time from said mobile station as taught by Jones for purpose of improving the technique for a new location registration and a registration update of a mobile station in a prescribed service area in order to enhance the quality and reliability of wireless telecommunication service.

Regarding claim 6, Bahl et al. and Jones disclose a location registration method as recited in the rejection of claim 5. Bahl et al. further disclose wherein the first step notifies said location management agent of the moving schedule information automatically by schedule managing means installed in said mobile station (col. 4, lines 45-53).

Regarding claim 7, Bahl et al. disclose in figures 1 and 2, a resource control method in a mobile communication system (fig. 1) conducting a new location registration and a registration update (col. 19, lines 17-31) of a mobile station (MU) in a prescribed service area, said resource control method in a mobile communication system comprising:

a first step of registering moving schedule information about the mobile station (MU) in a location registration database of a location management agent (MSC) such that the moving schedule information has correspondence with moving schedule time (col. 7, line 56-col. 8, line 16 and col. 11, lines 12-22); and

a second step of adaptively controlling the number of the radio channels to be assigned to the location registration area by a resource management agent installed in each location registration area in the prescribed service area in response to a command sent from said location management agent (col. 11, lines 1-35), in accordance with the moving schedule information registered in said location registration database (col. 18, lines 5-67 and col. 20, lines 22-67).

But, Bahl et al. fail to explicitly show an original position and a scheduled destination location registration area of the mobile station at the time. However, Jones teaches an original position and a scheduled destination location registration area of the mobile station at the time (col. 6, lines 47-64 and col. 5, lines 7-20). Since, Bahl et al. and Jones are related to monitoring travel of a mobile phone and since Bahl et al. teach sending a schedule of moving through cells (a crude timeline); therefore, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Bahl et al. by specifically having an original position and a scheduled destination location registration area of the mobile station at the time as taught by Jones for purpose of improving the technique for a new location registration and a registration update of a mobile station in a prescribed service area in order to enhance the quality and reliability of wireless telecommunication service.

Regarding claim 8, Bahl et al. disclose a recording medium recording a computer readable program (col. 8, lines 19-24) of a location registration method of a mobile station (MU) in a mobile communication system (fig. 1) including a location management agent (MSC) for conducting a new location registration and a registration update (col. 19, lines 17-31) of the mobile station in a prescribed service area, said program causes a computer to execute:

a first step of sending moving schedule information from said mobile station to said location management agent in advance (col. 7, line 56-col. 8, line 16 and col. 11, lines 12-22);

a second step of registering, in a location registration database provided in said location management agent, the moving schedule information about the mobile station in correspondence and a scheduled destination location registration area (col. 19, lines 17-31 and col. 11, lines 12-59); and

a third step of updating the location registration area of the mobile station in the prescribed service area at the particular time by said location management agent with

referring to said location registration database (col. 19, lines 17-31 and col. 11, lines 12-59).

But, Bahl et al. do not particular disclose sending moving schedule information at a particular time from said mobile station. However, Jones teaches sending moving schedule information at a particular time from said mobile station (col. 3, lines 19-31 and col. 7, lines 17-34). Since, Bahl et al. and Jones are related to monitoring travel of a mobile phone and since Bahl et al. teach sending a schedule of moving through cells (a crude timeline); therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Bahl et al. by specifically sending moving schedule information at a particular time from said mobile station as taught by Jones for purpose of improving the technique for a new location registration and a registration update of a mobile station in a prescribed service area in order to enhance the quality and reliability of wireless telecommunication service.

Regarding claim 9, Bahl et al. and Jones disclose a recording medium as recited in the rejection of claim 8. Bahl et al. further disclose wherein the first step of said program notifies said location management agent of the moving schedule information automatically by schedule managing means installed in said mobile station (col. 8, lines 19-24 and col. 4, lines 45-53).

Regarding claim 10, Bahl et al. disclose a recording medium (col. 8, lines 19-24) recording a computer readable program of a resource control method in a mobile

communication system (fig. 1) conducting a new location registration and a registration update (col. 19, lines 17-31) of a mobile station (MU) in a prescribed service area, said program causes a computer to execute:

a first step of registering moving schedule information about the mobile station (MU) in a location registration database of a location management agent (MSC) such that the moving schedule information has correspondence with moving schedule time (col. 7, line 56-col. 8, line 16 and col. 11, lines 12-22);

a second step of adaptively controlling the number of the radio channels to be assigned to the location registration area by a resource management agent installed in each location registration area in the prescribed service area in response to a command sent from said location management agent (col. 11, lines 1-35), in accordance with the moving schedule information registered in said location registration database (col. 18, lines 5-67 and col. 20, lines 22-67).

But, Bahl et al. do not particular disclose an original position and a scheduled destination location registration area of the mobile station at the time. However, Jones teaches an original position and a scheduled destination location registration area of the mobile station at the time (col. 6, lines 47-64 and col. 5, lines 7-20). Since, Bahl et al. and Jones are related to monitoring travel of a mobile phone and since Bahl et al. teach sending a schedule of moving through cells (a crude timeline); therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Bahl et al. by specifically having an original position and a scheduled destination location registration area of the mobile station at the time as

taught by Jones for purpose of improving the technique for a new location registration and a registration update of a mobile station in a prescribed service area in order to enhance the quality and reliability of wireless telecommunication service.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Jones et al. (US-6,363,254) disclose a method for communicating vehicle tracking information.

b) Raffel (US-6,223,042) discloses a method of roaming using network information.

c) Ueda et al. (US-6,038,442) disclose a method for managing mobility information.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy Q Phan whose telephone number is 703-305-9007. The examiner can normally be reached on 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Urban F Edward can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phan, Huy Q AU: 2685 May 28, 2004

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